Claims:

1. A method for calculating hashing of a message (FM) in a device communicating with a smart card, said device and said smart card storing the same hash function, the message comprising data blocks including secret data (SD) and other data (PD), secret data (SD) being only known by the smart card, characterized in that the calculation of the hash of the secret data (SD) is performed in the smart card and the calculation of the hash of all or part of the other data (PD) is performed in the device.

2. The method according to claim 1, characterized in that, if data (SD) is followed by the other data (PD) in the message (FM), the smart card starts calculating the hash of all blocks that include a secret data (SD) and then sends the corresponding intermediate result (R) to the (ME) that continue the hash calculation by using the intermediate result (R) and the remaining data (PD).

3. The method according to claim 2, characterized in that, if said Hash function hashes a message block by block, and if a block includes a part comprising secret data (SD) and another part comprising other data (PD), the smart card calculates the hash of this block.

4. The method according to claim 1, characterized in that, if data (PD) is followed by the other data (SD), the device (ME) starts calculating the hash of (PD) and then sends the corresponding intermediate result (R) and remaining part (RP) of last hash block to the smart card that continue to do the hash calculation internally by using the intermediate result (R), last hash block and the remaining data (SD).

5. Communication device ME being able to be coupled to a smart card CAR, said device and said smart card storing the same hash

function, the message (MF) comprising data blocks including secret data (SD) and other data (PD), secret data (SD) being only known by the smart card, characterized in that said device includes a program for performing the following steps:

- a hashing step in which all or part of said other data (PD) are hashed in said communication device,
- a requesting step in which, said communication system request the smart card to perform the hash of all the secret data (SD).

6. A smart card (CAR) coupled to a Communication device (ME), said device and said smart card storing the same hash function, the message (MF) comprising data blocks including secret data (SD) and other data (PD), secret data (SD) being only known by the smart card, characterized in that said smart card includes a program for performing, when requested by the communication device (ME) as defined in claim 5, a step of hashing of all of said secret data (SD).